

IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Currently Amended) A variable-length code decoding apparatus which receives a bitstream of variable-length-encoded image data and outputs symbol data, comprising:

~~cueing~~ queuing means for ~~cueing~~ queuing a variable-length code word from the received bitstream;

discrimination means for discriminating a type of a code word in accordance with a pattern of a predetermined number of bits at a start of the variable-length code word ~~cued~~ queued by said ~~cueing~~ queuing means;

extraction means for extracting data having a sufficient code word length from a predetermined bit position on the basis of a discrimination result from said discrimination means;

a Huffman table which compares the extracted data with a variable-length code word stored in advance, and when the data and the variable-length code word coincide, outputs first symbol data;

~~addition-arithmetic computing~~ means for generating modifying, for the first symbol data output from said Huffman table, ~~a sum value corresponding to the first symbol data and adding the generated sum value to the first symbol to output~~ generating a plurality of types of second symbol data in accordance with the modified first symbol;

decoding means for selecting a predetermined bit lane from the variable-length code word ~~cued~~ queued by said ~~cueing~~ queuing means and outputting the bit lane as third symbol data; and

selection means for selecting and outputting one of the first symbol data output from said Huffman table, the second symbol data generated by said ~~addition~~ arithmetic computing means, and the third symbol data generated by said decoding means, in accordance with a value of the variable-length code word ~~[[cued]]~~ queued by said ~~cueing~~ queuing means.

2. (Currently Amended) The apparatus according to claim 1, wherein the symbol data ~~added~~ calculated by said ~~addition-arithmetic~~ arithmetic computing means are RUN and LEVEL.

3. (Original) The apparatus according to claim 1, wherein said discrimination means discriminates whether the code word is an escape code.

4. (Original) The apparatus according to claim 1, wherein the received bitstream is image data encoded by MPEG-4 encoding.

5. (Currently Amended) A variable-length code decoding method which receives a bitstream of variable-length-encoded image data and decodes the bitstream to at least symbol data, comprising:

a ~~cueing~~ queuing step₁ of ~~cueing~~ queuing a variable-length code word from the received bitstream;

a discrimination step₂ of discriminating a type of a code word in accordance with a pattern of a predetermined number of bits at a start of the variable-length code word ~~[[cued]]~~ queued in the ~~said~~ cueing queuing step;

an extraction step₃ of extracting data having a sufficient code word length from a predetermined bit position on the basis of a discrimination result obtained in ~~[[the]]~~ said discrimination step;

a Huffman decoding step₄ of comparing the extracted data with a variable-length code word stored in advance as a Huffman table, and when the data and the variable-length code word coincide, outputting first symbol data;

~~an addition arithmetic~~ a computing step₅ of generating modifying, for the first symbol data output in ~~[[the]]~~ said Huffman decoding step, ~~a sum value corresponding to the first symbol data and adding the generated sum value to the first symbol to output~~ generating a plurality of types of second symbol data in accordance with the modified first symbol;

a decoding step₆ of selecting a predetermined bit lane from the variable-length code word ~~[[cued]]~~ queued in ~~[[the]]~~ said ~~cueing queuing~~ step and outputting the bit lane as third symbol data; and

a selection step₇ of selecting and outputting one of the first symbol data output from the Huffman table, the second symbol data generated in ~~the addition arithmetic~~ said computing step, and the third symbol data generated in ~~[[the]]~~ said

decoding step, in accordance with a value of the variable-length code word [[cued]] queued in [[the]] said cueing queuing step.

6. (Currently Amended) A computer program which functions as a variable-length code decoding apparatus which receives a bitstream of variable-length encoded image data and outputs symbol data, characterized by functioning as:

cueing queuing means for cueing queuing a variable-length code word from the received bitstream;

discrimination means for discriminating a type of a code word in accordance with a pattern of a predetermined number of bits at a start of the variable-length code word cued by said cueing queuing means;

extraction means for extracting data having a sufficient code word length from a predetermined bit position on the basis of a discrimination result from said discrimination means;

a Huffman table which compares the extracted data with a variable-length code word stored in advance, and when the data and the variable-length code word coincide, outputs first symbol data;

~~addition arithmetic computing~~ means for generating modifying, for the first symbol data output from said Huffman table, ~~a sum value corresponding to the first symbol data and adding the generated sum value to the first symbol to output~~ generating a plurality of types of second symbol data in accordance with the modified first symbol;

decoding means for selecting a predetermined bit lane from the variable-length code word ~~[[cued]]~~ queued by said ~~cueing~~ queuing means and outputting the bit lane as third symbol data; and

selection means for selecting and outputting one of the first symbol data output from said Huffman table, the second symbol data generated by said ~~addition~~ arithmetic computing means, and the third symbol data generated by said decoding means, in accordance with a value of the variable-length code word ~~[[cued]]~~ queued by said ~~cueing~~ queuing means.

7. (Original) A computer-readable storage medium which stores a computer program of claim 6.